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3614 Rose PORTER 13 MAY 2005

Docket: 186660/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Xiangyin Kong Applicant: International PCT/CN2003/000956 Appln. No.: International Unknown Filing Date 13 November 2003 (13.11.2003) Examiner: METHOD OF DIAGNOSING AND TREATING **BALDNESS USING HUMAN AND MOUSE** RHOR GENE AND CODED PRODUCT Group Art Unit: **THEREOF** Unknown Title:

COMMUNICATION UNDER 37 C.F.R. § 1.821

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

A paper copy of the SEQUENCE LISTING, to conform the above-identified application to the requirements of 37 C.F.R. §§ 1.821 through 1.825, is submitted herewith. In accordance with 37 C.F.R. § 1.821(e), a copy of the above-identified SEQUENCE LISTING in ASCII computer readable form is also enclosed herewith.

Respectfully submitted,

DORSEY & WHITNEY LLP Customer Number 25763

Date: May 13, 2005

Min (Amy) S. Xu, (Reg. No. 39,536) Intellectual Property Department Suite 1500, 50 South Sixth Street Minneapolis, MN 55402-1498

(612) 752-7367

10/534894

1011 PROFIT PORTETTO 13 MAY 2005

026806EX.TXT SEQUENCE LISTING

<110> SHANGHAI INSTITUTES FOR BIOLOGICAL SCIENCES, CAS <120> METHOD OF DIAGNOSING AND TREATING BALDNESS USING HUMAN AND MOUSE RHOR GENE AND CODED PRODUCT THEREOF <130> 026816 pc <150> CN 02145353.9 2002-11-13 <151> <160> 14 <170> PatentIn version 3.1 <210> <211> 2484 <212> DNA <213> Mus musculus <220> <221> CDS <222> (1)..(2481)<223> <400> 1 48 atg gcc tca gct gac aag aat ggc agc aac ctc cca tct gtg tct ggt Met Ala Ser Ala Asp Lys Asn Gly Ser Asn Leu Pro Ser Val Ser Gly agc cgc ctg cag agc cgg aag cca ccc aac ctc tcc atc acc atc ccg Ser Arg Leu Gln Ser Arg Lys Pro Pro Asn Leu Ser Ile Thr Ile Pro 96 cca cca gag agc cag gcc ccc ggc gag cag gat agc atg ctt cct gag Pro Pro Glu Ser Gln Ala Pro Gly Glu Gln Asp Ser Met Leu Pro Glu 144 agg cgc aag aac cca gcc tac ctg aag agt gtc agc cta cag gag ccc Arg Arg Lys Asn Pro Ala Tyr Leu Lys Ser Val Ser Leu Gln Glu Pro 50 60 192 Arg Gly Arg Trp Gln Glu Gly Ala Glu Lys Arg Pro Gly Phe Arg Arg 65 cgg gga cga tgg cag gag ggc gca gag aag cgc ccc ggc ttc cgc cgc 240 cag gcc tcc ctg tcc cag agc atc cgc aag agc aca gcc cag tgg ttt 288 Gln Ala Ser Leu Ser Gln Ser Ile Arg Lys Ser Thr Ala Gln Trp Phe ggg gtc agc ggc gac tgg gag ggc aag cga caa aac tgg cat cgc Gly Val Ser Gly Asp Trp Glu Gly Lys Arg Gln Asn Trp His Arg Arg 336 100 agc ctg cac cac tgc agc gtg cac tat ggc cgc ctc aag gcc tcg tgc Ser Leu His His Cys Ser Val His Tyr Gly Arg Leu Lys Ala Ser Cys 384 cag aga gaa ctg gag ctg ccc agc cag gag gtg cca tcc ttc cag ggc Gln Arg Glu Leu Glu Leu Pro Ser Gln Glu Val Pro Ser Phe Gln Gly 432

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SEQUENCE LISTING

<110> SHANGHAI INSTITUTES FOR BIOLOGICAL SCIENCES, CAS

<120> METHOD OF DIAGNOSING AND TREATING BALDNESS USING HUMAN AND MOUSE RHOR GENE AND CODED PRODUCT THEREOF

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agc cgc ctg cag agc cgg aag cca ccc aac ctc tcc atc acc atc ccg Ser Arg Leu Gln Ser Arg Lys Pro Pro Asn Leu Ser Ile Thr Ile Pro 20 25 30 cca cca gag agc cag gcc ccc ggc gag cag gat agc atg ctt cct gag Pro Pro Glu Ser Gln Ala Pro Gly Glu Gln Asp Ser Met Leu Pro Glu 35 40 45 agg cgc aag aac cca gcc tac ctg aag agt gtc agc cta cag gag ccc Arg Arg Lys Asn Pro Ala Tyr Leu Lys Ser Val Ser Leu Gln Glu Pro 50 55 60 cgg gga cga tgg cag gag ggc gca gag aag cgc ccc ggc ttc cgc cgc Arg Gly Arg Trp Gln Glu Gly Ala Glu Lys Arg Pro Gly Phe Arg Arg 65 70 75 80 cag gcc tcc ctg tcc cag agc atc cgc aag agc aca gcc cag tgg ttt Gln Ala Ser Leu Ser Gln Ser Ile Arg Lys Ser Thr Ala Gln Trp Phe 85 90 95 ggg gtc agc ggc gac tgg gag ggc aac caa acc tgg cat cgc cgc Gly Val Ser Gly Asp Trp Glu Gly Lys Arg Gln Asn Trp His Arg Arg 100 105 110 agc ctg cac cac tgc agc gtg cac tat ggc cgc ctc aag gcc tcg tgc Ser Leu His His Cys Ser Val His Tyr Gly Arg Leu Lys Ala Ser Cys 115 120 125 cag aga gaa ctg gag ctg cac aag atc cca ag att gtg gat cca tcc ttc cag ggc Gln Arg Glu Leu Glu Leu Pro Ser Gln Glu Val Pro Ser Phe Gln Gly 130 135 140 act gag tct cca aaa ccg tgc aag atg ccc aag att gtg gat cca ctg Thr Glu Ser Pro Lys Pro Cys Lys Met Pro Lys Ile Val Asp Pro Leu 145 150 155 160 gct cgg ggt agg gcc ttc ccc 528	Met				Asp				Ser	Asn				Val	Ser		48
Ser Arg Leu Gln Ser Arg Lys Pro Pro Asn Leu Ser Ile Thr Ile Pro 20 25 30		cgc	ctg	cag	-	cgg	aag	cca			ctc	tcc	atc			CCE	96
144 Pro Pro Glu Ser Gln Ala Pro Gly Glu Gln Asp Ser Met Leu Pro Glu 35				Gln				Pro	Pro				Ile	Thr			
Arg Arg Lys Asn Pro Ala Tyr Leu Lys Ser Val Ser Leu Gln Glu Pro 50			Glu	agc			Pro	ggc Gly	gag			Ser	atg Met	ctt			144
Arg Gly Arg Trp Gln Glu Gly Ala Glu Lys Arg Pro Gly Phe Arg Arg 65 70 75 80 cag gcc tcc ctg tcc cag agc atc cgc aag agc aca gcc cag tgg ttt Gln Ala Ser Leu Ser Gln Ser Ile Arg Lys Ser Thr Ala Gln Trp Phe 85 90 95 ggg gtc agc ggc gac tgg gag ggc aag cga caa aac tgg cat cgt cgc Gly Val Ser Gly Asp Trp Glu Gly Lys Arg Gln Asn Trp His Arg Arg 100 105 110 agc ctg cac cac tgc agc gtg cac tat ggc cgc ctc aag gcc tcg tgc Ser Leu His His Cys Ser Val His Tyr Gly Arg Leu Lys Ala Ser Cys 115 120 125 cag aga gaa ctg gag ctg ccc agc cag gag gtg cca tcc ttc cag ggc Gln Arg Glu Leu Glu Leu Pro Ser Gln Glu Val Pro Ser Phe Gln Gly 130 135 140 act gag tct cca aaa ccg tgc aag atg ccc aag att gtg gat cca ctg Thr Glu Ser Pro Lys Pro Cys Lys Met Pro Lys Ile Val Asp Pro Leu 145 150 155 160 gct cgg ggt agg ggc cttc cgc cat cca gag ggt gag ccg cct cac 528	Arg	Arg				Ala	Tyr				Val	Ser					192
Gln Ala Ser Leu Ser Gln Ser Ile Arg Lys Ser Thr Ala Gln Trp Phe	Arg				Gln	Glu		-		Lys	Arg				Arg	Arg	240
Gly Val Ser Gly Asp Trp Glu Gly Lys Arg Gln Asn Trp His Arg Arg					Ser				Arg	Lys				Gln	Trp		288
Ser Leu His His Cys Ser Val His Tyr Gly Arg Leu Lys Ala Ser Cys 115 120 125 cag aga gaa ctg gag ctg ccc agc cag gag gtg cca tcc ttc cag ggc Gln Arg Glu Leu Glu Leu Pro Ser Gln Glu Val Pro Ser Phe Gln Gly 130 135 140 act gag tct cca aaa ccg tgc aag atg ccc aag att gtg gat cca ctg Thr Glu Ser Pro Lys Pro Cys Lys Met Pro Lys Ile Val Asp Pro Leu 145 150 155 160 gct cgg ggt agg gcc ttc cgc cat cca gat gag gtg gac cgg cct cac 528			Ser	Gly	Asp	Trp	Glu	Gly	Lys	Arg	Gln	Asn	Trp	His	Arg		336
Gln Arg Glu Leu Glu Leu Pro Ser Gln Glu Val Pro Ser Phe Gln Gly 130 135 140 act gag tct cca aaa ccg tgc aag atg ccc aag att gtg gat cca ctg Thr Glu Ser Pro Lys Pro Cys Lys Met Pro Lys Ile Val Asp Pro Leu 145 150 155 160 gct cgg ggt agg gcc ttc cgc cat cca gat gag gtg gac cgg cct cac 528			His					His				Leu	Lys				384
Thr Glu Ser Pro Lys Pro Cys Lys Met Pro Lys Ile Val Asp Pro Leu 145 150 155 160 gct cgg ggt agg gcc ttc cgc cat cca gat gag gtg gac cgg cct cac 528	Gln	Arg					Pro				Val	Pro					432
gct cgg ggt agg gcc ttc cgc cat cca gat gag gtg gac cgg cct cac 528	Thr					Pro				Pro	Lys				Pro	Leu	480
															cct	cac	528

get gec cac cca cca cct ctg act cca ggg gtc ctg tct ctc aca tcc ttc Ala Ala His Pro Pro Leu Thr Pro Gly Val Leu Ser Leu Thr Ser Phe 180
acc agt gtc cgc tct ggc tact cct cat ctg ccc cgc cgc aag agg ata
Thr Ser Val Arg Ser Gly Tyr Ser His Leu Pro Arg Arg Lys Arg Ile 195 200 205 105 205 105 216 217 218 220 215 220 105 126 218 220 215 220 107 216 220 215 220 108 216 220 220 109 216 220 220 109 216 220 220 109 216 220 220 109 216 220 220 109 216 220 220 109 216 220 220 109 216 220 220 109 216 220 220 109 217 220 230 235 240 109 218 225 230 235 240 109 218 225 230 255 240 109 218 225 250 255 109 255 109 265 250 255 109 265 270 100 265 27
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Ser Val Ala His Met Ser Phe Gln Ala Ala Ala Ala Leu Leu Lys Gly 210
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Arg Ser Val Leu Asp Ala Thr Gly Gln Arg Cys Arg His Val Lys Arg 230 235 240 agc ttc gct tac ccc agc ttc ctg gag gag gat gct gtc gat gga gct 768 Ser Phe Ala Tyr Pro Ser Phe Leu Glu Glu Asp Ala Val Asp Gly Ala 245 250 255 gac acc ttc gac tcc tcc ttt ttt agt aag gaa gaa atg agc tcc atg Asp Thr Phe Asp Ser Ser Phe Phe Ser Lys Glu Glu Met Ser Ser Met 260 270 cct gac gat gtc ttt gag tcc ccc cca ctc tct gcc agc tac ttc cga 864 Pro Asp Asp Val Phe Glu Ser Pro Pro Pro Leu Ser Ala Ser Tyr Phe Arg 275 280 ggt gtc cca cac tct gcc tcc ccg gtc tcc ccg gat gga gtg cac atc 290 295 ggt gtc cca aca tct gcc tcc ccg gtc tcc ccg gat gga gtg cac atc 290 295 ccg cta aaa gaa tac agc ggt ggc cga gcc ctg ggt ccc ggg acc cag 296 300 ccg cta aaa gaa tac agc ggt ggc ggc cga gcc ctg ggt ccc ggg acc cag 296 300 ccg cta aaa gaa tac agc ggt ggc ggc ctg ggc ctg ggt ccc ggg acc cag 296 320 cgt ggc aaa cgc att gcc tcc aaa gta aag cac ttt gca ttt gac cg 1008 Arg Gly Lys Arg Ile Ala Ser Lys Val Lys His Phe Ala Phe Asp Arg 325 330 335 aag aag agg gaa gac tac acc ggc ctg ggt ggc ggg gag gac cag gac ggg agg gac cag 330 335 336 aag aag agg cac tac ggc acc agg agg ggg ggg ggg ggg ggg g
225
agc ttc gct tac ccc agc ttc ctg gag gag gat gct gtc gat gga gct 768 Ser Phe Ala Tyr Pro Ser Phe Leu Glu Glu Asp Ala Val Asp Gly Ala 250 255 gac acc ttc gac tcc tcc ttt ttt agt aag gaa gaa atg agc tcc atg Asp Tr Phe Asp Ser Ser Phe Phe Ser Lys Glu Glu Met Ser Ser Met 260 265 270 cct gac gat gtc ttt gag tcc ccc ccc cca ctc tct gcc agc tac ttc cga Pro Asp Asp Val Phe Glu Ser Pro Pro Leu Ser Ala Ser Tyr Phe Arg 275 280 285 ggt gtc cca cac tct gcc tcc ccg gtc tcc ccg gat gag gg gag gag gag gag gag gag gag
gac acc ttc gac tcc ttc ttt ttt agt aag gaa gaa atg agc tcc atg 816 Asp Thr Phe Asp Ser Ser Phe Phe Ser Lys Glu Glu Met Ser Ser Met 260
gac acc ttc gac tcc tcc ttt ttt agt aag gaa gaa atg agc tcc atg 816 Asp Thr Phe Asp Ser Ser Phe Phe Ser Lys Glu Glu Met Ser Ser Met 260 265 270 cct gac gat gtc ttt gag tcc ccc cca ctc tct gcc agc tac ttc cga 864 Pro Asp Asp Val Phe Glu Ser Pro Pro Leu Ser Ala Ser Tyr Phe Arg 275 280 285 ggt gtc cca cac tct gcc tcc ccg gtc tcc ccg gat gag gg
Asp Thr Phe Asp Ser Ser Phe Phe Ser Lys Glu Glu Met Ser Ser Met 260 265 270 cct gac gat gtc ttt gag tcc ccc cca ctc tct gcc agc tac ttc cga 864 Pro Asp Asp Val Phe Glu Ser Pro Pro Leu Ser Ala Ser Tyr Phe Arg 275 280 285 ggt gtc cca cac tct gcc tcc ccg gtc tcc ccg gat gga gtg cac atc 912 Gly Val Pro His Ser Ala Ser Pro Val Ser Pro Asp Gly Val His Ile 290 300 ccg cta aaa gaa tac agc ggt ggc cga gcc ctg ggt ccc ggg acc cag 960 Pro Leu Lys Glu Tyr Ser Gly Gly Arg Ala Leu Gly Pro Gly Thr Gln 305 310 315 320 cgt ggc aaa cgc att gcc tcc aaa gta aag cac ttt gca ttt gac cgg 1008 Arg Gly Lys Arg Ile Ala Ser Lys Val Lys His Phe Ala Phe Asp Arg 325 330 335 aag aag agg cac tac ggc ctg ggt ggt ggt ggt ggt ggt ggt gg
CCt gac gat gtc ttt gag tcc ccc cca ctc tct gcc agc tac ttc cga
Cct gac gat gtc ttt gag tcc ccc cca ctc tct gcc agc tac ttc cga
Pro Asp Asp Val Phe Glu Ser Pro Pro Leu Ser Ala Ser Tyr Phe Arg 275 ggt gtc cca cac cac tct gcc tcc ccg gtc tcc ccg gat gga gtg cac atc Gly Val Pro His Ser Ala Ser Pro Val Ser Pro Asp Gly Val His Ile 290 912 ccg cta aaa gaa tac agc ggt ggc cga gcc ctg ggt ccc ggg acc cag Pro Leu Lys Glu Tyr Ser Gly Gly Arg Ala Leu Gly Pro Gly Thr Gln 305 310 315 320 cgt ggc aaa cgc att gcc tcc aaa gta aga aag cac ttt gac cgg 325 330 335 320 cgt ggc aaa gg agg cgc ttg ggc ggc ggc ggc ggc ggc ggc g
ggt gtc cca cac tct gcc tcc ccg gtc tcc ccg gat gga gtg cac atc
Gly Val Pro His Ser Ala Ser Pro Val Ser Pro Asp Gly Val His Ile 290 295 300 ccg cta aaa gaa tac agc ggt ggc cga gcc ctg ggt ccc ggg acc cag Pro Leu Lys Glu Tyr Ser Gly Gly Arg Ala Leu Gly Pro Gly Thr Gln 305 310 315 320 cgt ggc aaa cgc att gcc tcc aaa gta aag cac ttt gca ttt gac cgg Arg Gly Lys Arg Ile Ala Ser Lys Val Lys His Phe Ala Phe Asp Arg 325 330 335 aag aag agg cac tac ggc ctg ggt gtc gtg ggt aac tgg ctc aac cga Lys Lys Arg His Tyr Gly Leu Gly Val Val Gly Asn Trp Leu Asn Arg 340 345 350 agc tat cga cgc agc atc agc agc acc gtg cag cag ctg gag agc 1104 Ser Tyr Arg Arg Ser Ile Ser Ser Thr Val Gln Arg Gln Leu Glu Ser 355 360 365 ttc gat agc cac cgg ccc tac ttc acc tac tgg ctg acg ttc gt cac Phe Asp Ser His Arg Pro Tyr Phe Thr Tyr Trp Leu Thr Phe Val His 370 375 380 atc atc atc acc ttg ctg gtg atc tgc acc tat ggc atc gca cct gtg Ile Ile Ile Thr Leu Leu Val Ile Cys Thr Tyr Gly Ile Ala Pro Val 385 390 395 400 ggc ttt gcc cag cac gtt acc acc acc acc acc acc acc acc acc a
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ccg cta aaa gaa tac agc ggt ggc cga gcc ctg ggt ccc ggg acc cag 960 Pro Leu Lys Glu Tyr Ser Gly Gly Arg Ala Leu Gly Pro Gly Thr Gln 305 310 315 320 cgt ggc aaa cgc aat gcc tcc aaa gta aag cac ttt gca ttt gac cgg 1008 Arg Gly Lys Arg Ile Ala Ser Lys Val Lys His Phe Ala Phe Asp Arg 325 330 335 aag aag agg cac tac ggc ctg ggt gtc gtg ggt aac tgg ctc aac cga 1056 Lys Lys Arg His Tyr Gly Leu Gly Val Val Gly Asn Trp Leu Asn Arg 340 345 350 agc tat cga cgc agc atc agc agc acc gtg cag cgg cag ctg gag agc 1104 Ser Tyr Arg Arg Ser Ile Ser Ser Thr Val Gln Arg Gln Leu Glu Ser 355 360 365 ttc gat agc cac cgg ccc tac ttc acc tac ttg ctg ctg acg ttc gtt cac 1152 Phe Asp Ser His Arg Pro Tyr Phe Thr Tyr Trp Leu Thr Phe Val His 370 375 380 atc atc atc acc ttg ctg gtg atc tgc acc tat ggc atc gca cct gtg 1200 1200 11e Ile Ile Thr Leu Leu Val Ile Cys Thr Tyr Gly Ile Ala Pro Val 385 390 395 400 ggc ttt gcc cag cac gtt acc acc cag ctg gtg ctg aag aac aga aga aac aga ggc Gly Phe Ala Gln His Val Thr Thr Gln Leu Val Leu Lys Asn Arg Gly 405 410 415
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Arg Gly Lys Arg Ile Ala Ser Lys Val Lys His Phe Ala Phe Asp Arg 325 330 335 aag aag agg cac tac ggc ctg ggt gtc gtg ggt aac tgg ctc aac cga Lys Lys Arg His Tyr Gly Leu Gly Val Val Gly Asn Trp Leu Asn Arg 340 345 350 agc tat cga cgc agc atc agc agc acc gtg cag cgg cag ctg gag agc Ser Tyr Arg Arg Ser Ile Ser Ser Thr Val Gln Arg Gln Leu Glu Ser 355 360 365 ttc gat agc cac cgg ccc tac ttc acc tac tgg ctg acg ttc gtt cac Phe Asp Ser His Arg Pro Tyr Phe Thr Tyr Trp Leu Thr Phe Val His 370 375 380 atc atc atc acc ttg ctg gtg atc tgc acc tat ggc atc gca cct gtg Ile Ile Ile Thr Leu Leu Val Ile Cys Thr Tyr Gly Ile Ala Pro Val 385 390 395 400 ggc ttt gcc cag cac gtt acc acc cag ctg gtg ctg aag aac aga ggc Gly Phe Ala Gln His Val Thr Thr Gln Leu Val Leu Lys Asn Arg Gly 405 410 415
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Lys Lys Arg His Tyr Gly Leu Gly Val Val Gly Asn Trp Leu Asn Arg
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gtg tat gag agc gtg aag tac atc cag cag gag aac ttc tgg att ggc 1296
Val Tyr Glu Ser Val Lys Tyr Ile Gln Glu Asn Phe Trp Ile Gly
420 425 430
ccc agc tcg att gac ctc att cac ctg gga gca aag ttc tcg ccc tgc 1344 Pro Ser Ser Ile Asp Leu Ile His Leu Gly Ala Lys Phe Ser Pro Cys
435 440 445
atc cgg aag gac cag caa att gag cag ctg gta cgg agg gag cgc gac 1392
Ile Arg Lys Asp Gln Gln Ile Glu Gln Leu Val Arg Arg Glu Arg Asp
450 455 460
att gag cgc acc tct ggc tgc tgt gtc cag aat gac cgc tcg ggc tgc 1440 Ile Glu Arg Thr Ser Gly Cys Cys Val Gln Asn Asp Arg Ser Gly Cys
465 470 475 480
atc cag acc ctg aag aag gac tgc tcg gag act tta gcc acg ttc gta 1488

He	Gln	Thr		Lys 485	Lys	Asp	Cys	Ser	Glu 190	Thr	Leu	Ala		Phe 95	Val	
aag	tgg	cag	aat	gat	act	ggg	ссс	tca	gac	aag	tct	gac	ctg	agc	cag	1536
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aag	cag	cca	tcg	gcg	gii	g Lg	Corr	cac	Caa Cl-	gac A	D	agg	Th-	Cur	Clu	1004
		515					520	His			5	525				
gag	cct	gcc	tcc	agt	ggg	gcc	cac	atc	tgg	cct	gat	gac	att	acc	aag	1632
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t.gg		atc	t.gc	aca	gag	cag	gct	cag	agc	aac	cac	acg	ggc	ttg	ttg	1680
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								cgc								1120
HIS	11e	Asp	-		116	Lys	GIY	Arg		Cys	Cys	116			Lys	
				565					570					575		
								gag								1776
Gly	Ser	Cys	Glu	Ile	Thr	Thr	Arg	Glu	Tyr	Cys	Glu	Phe	Met	His	Gly	
			580					585					590			
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Lys		Cys	Gly	Leu			Pne	Leu	Asn			vaı	Pro	ASP	GIII	
	610					615					620					
								ttc								1920
Phe	Tyr	Arg	Ile	Trp	Leu	Ser	Leu	Phe	Leu	His	Ala	Gly	Ile	Val	His	
625					630				1	635				6	640	
tgc	ctt	gtg	tct	gtg	gtc	ttc	caa	atg	acc	atc	ctg	agg	gac	cta	gag	1968
	Leu	Val	Ser	Val	Val	Phe	Gln		Thr	Ile	Leu	Arg	Asp	Leu		
	Leu	Val	Ser		Val	Phe	Gln	Met		Ile	Leu	Arg		Leu 555		
Cys				645				Met	650				(	555	Glu	2016
Cys aag	ctg	gcc	ggc	645 tgg	cac	cgc	atc	Met tcc	650 atc	atc	ttc	atc	ctt	555 agt	Glu	2016
Cys aag	ctg	gcc	ggc Gly	645 tgg	cac	cgc	atc Ile	Met tcc Ser	650 atc	atc	ttc	atc Ile	ctt Leu	555 agt	Glu	2016
Cys aag Lys	ctg Leu	gcc Ala	ggc Gly 660	645 tgg Trp	cac His	cgc Arg	atc Ile	Met tcc Ser 665	650 atc Ile	atc Ile	ttc Phe	atc Ile	ctt Leu 670	655 agt Ser	Glu ggc Gly	
Cys aag Lys att	ctg Leu aca	gcc Ala	ggc Gly 660 aac	645 tgg Trp ctg	cac His	cgc Arg	atc Ile gcc	tcc Ser 665 atc	650 atc Ile ttc	atc Ile	ttc Phe	atc Ile tac	ctt Leu 670 cgg	agt Ser gca	ggc Gly gag	2016 2064
Cys aag Lys att	ctg Leu aca	gcc Ala ggc Gly	ggc Gly 660 aac	645 tgg Trp ctg	cac His	cgc Arg agc Ser	atc Ile gcc Ala	Met tcc Ser 665	650 atc Ile ttc	atc Ile	ttc Phe ccc Pro	atc Ile tac Tyr	ctt Leu 670 cgg	agt Ser gca	ggc Gly gag	
Cys aag Lys att Ile	ctg Leu aca Thr	gcc Ala ggc Gly 675	ggc Gly 660 aac Asn	645 tgg Trp ctg Leu	cac His gcc Ala	cgc Arg agc Ser	atc Ile gcc Ala 680	tcc Ser 665 atc Ile	atc Ile ttc Phe	atc Ile ctc Leu	ttc Phe ccc Pro	atc Ile tac Tyr 685	ctt Leu 670 cgg Arg	agt Ser gca Ala	Glu ggc Gly gag Glu	2064
Cys aag Lys att Ile gtg	ctg Leu aca Thr	gcc Ala ggc Gly 675 cca	ggc Gly 660 aac Asn	645 tgg Trp ctg Leu	cac His gcc Ala	cgc Arg agc Ser	atc Ile gcc Ala 680 ttc	tcc Ser 665 atc Ile	atc Ile ttc Phe	atc Ile ctc Leu	ttc Phe ccc Pro	atc Ile tac Tyr 685 tgc	ctt Leu 670 cgg Arg	agt Ser gca Ala	Glu ggc Gly gag Glu gtg	
Cys aag Lys att Ile gtg	ctg Leu aca Thr	gcc Ala ggc Gly 675 cca	ggc Gly 660 aac Asn	645 tgg Trp ctg Leu	cac His gcc Ala	cgc Arg agc Ser	atc Ile gcc Ala 680 ttc	tcc Ser 665 atc Ile	atc Ile ttc Phe	atc Ile ctc Leu	ttc Phe ccc Pro	atc Ile tac Tyr 685 tgc	ctt Leu 670 cgg Arg	agt Ser gca Ala	Glu ggc Gly gag Glu gtg	2064
Cys aag Lys att Ile gtg	ctg Leu aca Thr	gcc Ala ggc Gly 675 cca	ggc Gly 660 aac Asn	645 tgg Trp ctg Leu	cac His gcc Ala	cgc Arg agc Ser	atc Ile gcc Ala 680 ttc	tcc Ser 665 atc Ile	atc Ile ttc Phe	atc Ile ctc Leu ctc Leu	ttc Phe ccc Pro	atc Ile tac Tyr 685 tgc	ctt Leu 670 cgg Arg	agt Ser gca Ala	Glu ggc Gly gag Glu gtg	2064
Cys aag Lys att Ile gtg Val	ctg Leu aca Thr ggc Gly 690	gcc Ala ggc Gly 675 cca Pro	ggc Gly 660 aac Asn gcc Ala	tgg Trp ctg Leu ggg Gly	cac His gcc Ala tcg Ser	cgc Arg agc Ser cag Gln 695	atc Ile gcc Ala 680 ttc Phe	tcc Ser 665 atc Ile ggc Gly	atc Ile ttc Phe ctc Leu	atc Ile ctc Leu ctc Leu	ttc Phe ccc Pro gcc Ala 700	atc Ile tac Tyr 685 tgc Cys	ctt Leu 670 cgg Arg ctc Leu	agt Ser gca Ala ttc Phe	ggc Gly gag Glu gtg Val	2064
Cys aag Lys att Ile gtg Val	ctg Leu aca Thr ggc Gly 690 ctg	gcc Ala ggc Gly 675 cca Pro	ggc Gly 660 aac Asn gcc Ala	tgg Trp ctg Leu ggg Gly	cac His gcc Ala tcg Ser	cgc Arg agc Ser cag Gln 695 cag	atc Ile gcc Ala 680 ttc Phe	tcc Ser 665 atc Ile ggc Gly	atc Ile ttc Phe ctc Leu	atc Ile ctc Leu ctc Leu	ttc Phe ccc Pro gcc Ala 700 ccg	atc Ile tac Tyr 685 tgc Cys	ctt Leu 670 cgg Arg ctc Leu	agt Ser gca Ala ttc Phe	Glu ggc Gly gag Glu gtg Val ttc	2064 2112
Cys aag Lys att Ile gtg Val gag Glu	ctg Leu aca Thr ggc Gly 690 ctg	gcc Ala ggc Gly 675 cca Pro	ggc Gly 660 aac Asn gcc Ala	tgg Trp ctg Leu ggg Gly	cac His gcc Ala tcg Ser tgg Trp	cgc Arg agc Ser cag Gln 695 cag	atc Ile gcc Ala 680 ttc Phe	tcc Ser 665 atc Ile ggc Gly	atc Ile ttc Phe ctc Leu gag Glu	atc Ile ctc Leu ctc Leu cgg Arg	ttc Phe ccc Pro gcc Ala 700 ccg	atc Ile tac Tyr 685 tgc Cys	ctt Leu 670 cgg Arg ctc Leu	agt Ser gca Ala ttc Phe gcc	Glu ggc Gly gag Glu gtg Val ttc Phe	2064 2112
Cys aag Lys att Ile gtg Val gag Glu 705	ctg Leu aca Thr ggc Gly 690 ctg Leu	gcc Ala ggc Gly 675 cca Pro ttc	ggc Gly 660 aac Asn gcc Ala cag Gln	tgg Trp ctg Leu ggg Gly agc Ser	cac His gcc Ala tcg Ser tgg Trp 710	cgc Arg agc Ser cag Gln 695 cag Gln	atc Ile gcc Ala 680 ttc Phe ctg Leu	tcc Ser 665 atc Ile ggc Gly ttg Leu	atc Ile ttc Phe ctc Leu gag Glu	atc Ile ctc Leu ctc Leu cgg Arg 715	ttc Phe ccc Pro gcc Ala 700 ccg Pro	atc Ile tac Tyr 685 tgc Cys tgg Trp	ctt Leu 670 cgg Arg ctc Leu aag Lys	agt Ser gca Ala ttc Phe gcc	ggc Gly gag Glu gtg Val ttc Phe	2064 2112 2160
Cys aag Lys att Ile gtg Val gag Glu 705 ttc	ctg Leu aca Thr ggc Gly 690 ctg Leu	gcc Ala ggc Gly 675 cca Pro ttc Phe	ggc Gly 660 aac Asn gcc Ala cag Gln	tgg Trp ctg Leu ggg Gly agc Ser	cac His gcc Ala tcg Ser tgg Trp 710 att	cgc Arg agc Ser cag Gln 695 cag Gln	atc Ile gcc Ala 680 ttc Phe ctg Leu	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc	atc Ile ttc Phe ctc Leu gag Glu ctc	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc	ttc Phe ccc Pro gcc Ala 700 ccg Pro	atc Ile tac Tyr 685 tgc Cys tgg Trp	ctt Leu 670 cgg Arg ctc Leu aag Lys	agt Ser gca Ala ttc Phe gcc Ala	ggc Gly gag Glu gtg Val ttc Phe 720 ctg	2064 2112
Cys aag Lys att Ile gtg Val gag Glu 705 ttc	ctg Leu aca Thr ggc Gly 690 ctg Leu	gcc Ala ggc Gly 675 cca Pro ttc Phe	ggc Gly 660 aac Asn gcc Ala cag Gln	tgg Trp ctg Leu ggg Gly agc Ser	cac His gcc Ala tcg Ser tgg Trp 710 att	cgc Arg agc Ser cag Gln 695 cag Gln	atc Ile gcc Ala 680 ttc Phe ctg Leu	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe	atc Ile ttc Phe ctc Leu gag Glu ctc Leu	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc	ttc Phe ccc Pro gcc Ala 700 ccg Pro	atc Ile tac Tyr 685 tgc Cys tgg Trp	ctt Leu 670 cgg Arg ctc Leu aag Lys	gca Ala ttc Phe gcc Ala ctc Leu	ggc Gly gag Glu gtg Val ttc Phe 720 ctg	2064 2112 2160
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe	ctg Leu aca Thr ggc Gly 690 ctg Leu aac	gcc Ala ggc Gly 675 cca Pro ttc Phe	ggc Gly 660 aac Asn gcc Ala cag Gln tcg	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725	cac His gcc Ala tcg Ser tgg Trp 710 att	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val	atc Ile gcc Ala 680 ttc Phe ctg Leu ctt	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe	atc Ile ttc Phe ctc Leu gag Glu ctc Leu 730	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe	ttc Phe ccc Pro gcc Ala 700 ccg Pro	atc Ile tac Tyr 685 tgc Cys tgg Trp	ctt Leu 670 cgg Arg ctc Leu aag Lys	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu	2064 2112 2160 2208
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac	cac His gcc Ala tcg Ser tgg Trp 710 att Ile	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val	atc Ile gcc Ala 680 ttc Phe ctg Leu ctt	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe	atc Ile ttc Phe ctc Leu gag Glu ctc Leu 730 ttc	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys	ctt Leu 670 cgg Arg ctc Leu aag Lys	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu	2064 2112 2160
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac	cac His gcc Ala tcg Ser tgg Trp 710 att Ile	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val	atc Ile gcc Ala 680 ttc Phe ctg Leu ctt	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile	atc Ile ttc Phe ctc Leu gag Glu ctc Leu 730 ttc	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu	2064 2112 2160 2208
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val	atc Ile gcc Ala 680 ttc Phe ctg Leu ctt Leu cac His	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745	atc Ile ttc Phe ctc Leu gag Glu ctc Leu Phe	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc Ile	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750	gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg	2064 2112 2160 2208 2256
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745	atc Ile ttc Phe ctc Leu gag Glu ctc Leu Phe att	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc Ile	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met	2064 2112 2160 2208
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745	atc Ile ttc Phe ctc Leu gag Glu ctc Leu Phe att	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc Ile	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met	2064 2112 2160 2208 2256
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745	atc Ile ttc Phe ctc Leu gag Glu ctc Leu Phe att	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc	ttc Phe ccc Pro gcc Alaa 700 ccg Pro atc Ile ttc Phe	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met	2064 2112 2160 2208 2256
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro ctt Leu	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc Ala 755	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc Phe	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc Phe	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct Pro 760	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745 tac Tyr	atc Ile ttc Phe ctc Leu gag Glu ctc Leu ttc Phe att Ile	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc Thr	ttc Phe ccc Pro gcc Alaa 700 ccg Pro atc Ile ttc Phe	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu ggc Gly 765	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc Thr	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc Ser	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met	2064 2112 2160 2208 2256
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro ctt Leu aag	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc Ala 755 cgc	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc Phe	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn gcc Ala	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc Phe gcc	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala ctg Leu ctc	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct Pro 760 atc	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745 tac Tyr ctc	atc Ile ttc Phe ctc Leu gag Glu ctc Leu ttc Phe att Ile gtg	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc Thr	ttc Phe ccc Pro gcc Alaa 700 ccg Pro atc Ile ttc Phe ctg	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu ggc Gly 765 ctg	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc Thr	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc Ser ttt	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met gac Asp gct	2064 2112 2160 2208 2256 2304
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro ctt Leu aag	ctg Leu aca Thr ggc Gly 690 ctg Leu acc Asn tgg Trp ctg Leu	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc Ala 755 cgc Arg	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc Phe	645 tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn gcc Ala	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc Phe gcc	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala ctg Leu ctc Leu	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct Pro 760 atc	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745 tac Tyr	atc Ile ttc Phe ctc Leu gag Glu ctc Leu ttc Phe att Ile gtg	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc Thr	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc Ile ttc Phe ctg Leu	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu ggc Gly 765 ctg	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc Thr	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc Ser ttt	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met gac Asp gct	2064 2112 2160 2208 2256 2304
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro ctt Leu aag Lys	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp ctg Leu	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc Ala 755 cgc Arg	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc Phe aag Lys	tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn gcc Ala Arg	cac His gcc Ala tcg Ser tgg Trp 710 att Ile ttc Phe gcc Ala	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala ctg Leu ctc Leu 775	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct Pro 760 atc Ile	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745 tac Tyr ctc Leu	atc Ile ttc Phe ctc Leu gag Glu ctc Leu ttc Phe att Ile gtg Val	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc Thr	ttc Phe ccc Pro gcc Ala 700 ccg Pro atc Ile ttc Phe ctg Leu 780	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu ggc Cly 765 ctg Leu	ctt Leu 670 cgg Arg ctc Leu aagg Lys ggc Gly agc Ser 750 acc Thr	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc Ser ttt Phe	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met gac Asp	2064 2112 2160 2208 2256 2304 2352
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro ctt Leu aag Lys	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp ctg Leu	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc Ala 755 cgc Arg	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc Phe aag Lys gct	tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn gcc Ala cga Arg	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc Phe gcc Ala ctg	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala ctg Leu ctc Leu 775 gtg	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct Pro 760 atc Ile ctg	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745 tac Tyr ctc Leu	atc Ile ttc Phe ctc Leu gag Glu ctc Leu ttc Phe att Ile gtg Val ctg	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc Thr tcg Ser tac	ttc Phe ccc Ala 700 ccg Pro atc Ile ttc Phe ctg Leu 780 atc	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu ggc Cly 765 ctg Leu tac	ctt Leu 670 cgg Arg ctc Leu aag Lys ggc Gly agc Ser 750 acc Thr gtc Val	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc Ser ttt Phe atc	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met gac Asp gct Ala aac	2064 2112 2160 2208 2256 2304
Cys aag Lys att Ile gtg Val gag Glu 705 ttc Phe ccc Pro ctt Leu aag Lys	ctg Leu aca Thr ggc Gly 690 ctg Leu aac Asn tgg Trp ctg Leu tac Tyr 770 ctc Leu	gcc Ala ggc Gly 675 cca Pro ttc Phe ctg Leu ata Ile gcc Ala 755 cgc Arg	ggc Gly 660 aac Asn gcc Ala cag Gln tcg Ser gac Asp 740 ttc Phe aag Lys gct	tgg Trp ctg Leu ggg Gly agc Ser gcc Ala 725 aac Asn gcc Ala cga Arg	cac His gcc Ala tcg Ser tgg Trp 710 att Ile atc Ile ttc Phe gcc Ala ctg	cgc Arg agc Ser cag Gln 695 cag Gln gtg Val gcc Ala ctg Leu ctc Leu 775 gtg	atc Ile gcc Ala 680 ttc Phe ctg Leu cac His cct Pro 760 atc Ile ctg	Met tcc Ser 665 atc Ile ggc Gly ttg Leu ttc Phe atc Ile 745 tac Tyr ctc Leu	atc Ile ttc Phe ctc Leu gag Glu ctc Leu gag ttc Phe att Ile gtg Val ctg Leu ctg Leu	atc Ile ctc Leu ctc Leu cgg Arg 715 ttc Phe ggg Gly acc Thr tcg Ser tac	ttc Phe ccc Ala 700 ccg Pro atc Ile ttc Phe ctg Leu 780 atc	atc Ile tac Tyr 685 tgc Cys tgg Trp tgt Cys ctc Leu ggc Cly 765 ctg Leu tac	ctt Leu 670 cgg Arg ctc Leu aag Lys ggc Gly agc Ser 750 acc Thr gtc Val	agt Ser gca Ala ttc Phe gcc Ala ctc Leu 735 ggc Gly agc Ser ttt Phe atc Ile	ggc Gly gag Glu gtg Val ttc Phe 720 ctg Leu atg Met gac Asp gct Ala aac	2064 2112 2160 2208 2256 2304 2352

tgg ccc tgg atc gag tac ctc acc tgc ttt ccc ttc acc agc cgc ttc 2448 Trp Pro Trp Ile Glu Tyr Leu Thr Cys Phe Pro Phe Thr Ser Arg Phe tgt gag aag tac gag cta gac cag gtg cta cac taa 2484 Cys Glu Lys Tyr Glu Leu Asp Gln Val Leu His <210> 2 <211> 827 <212> PRT <213> Mus musculus <400> 2 Met Ala Ser Ala Asp Lys Asn Gly Ser Asn Leu Pro Ser Val Ser Gly 1 5 10 Ser Arg Leu Gln Ser Arg Lys Pro Pro Asn Leu Ser Ile Thr Ile Pro 25 Pro Pro Glu Ser Gln Ala Pro Gly Glu Gln Asp Ser Met Leu Pro Glu 40 Arg Arg Lys Asn Pro Ala Tyr Leu Lys Ser Val Ser Leu Gln Glu Pro 55 Arg Gly Arg Trp Gln Glu Gly Ala Glu Lys Arg Pro Gly Phe Arg Arg 70 75 Gln Ala Ser Leu Ser Gln Ser Ile Arg Lys Ser Thr Ala Gln Trp Phe 90 85 Gly Val Ser Gly Asp Trp Glu Gly Lys Arg Gln Asn Trp His Arg Arg 105 Ser Leu His His Cys Ser Val His Tyr Gly Arg Leu Lys Ala Ser Cys 120 125 Gln Arg Glu Leu Glu Leu Pro Ser Gln Glu Val Pro Ser Phe Gln Gly 135 Thr Glu Ser Pro Lys Pro Cys Lys Met Pro Lys Ile Val Asp Pro Leu 150 155 Ala Arg Gly Arg Ala Phe Arg His Pro Asp Glu Val Asp Arg Pro His 170 165 Ala Ala His Pro Pro Leu Thr Pro Gly Val Leu Ser Leu Thr Ser Phe 180 185 Thr Ser Val Arg Ser Gly Tyr Ser His Leu Pro Arg Arg Lys Arg Ile 200 Ser Val Ala His Met Ser Phe Gln Ala Ala Ala Ala Leu Leu Lys Gly 215 Arg Ser Val Leu Asp Ala Thr Gly Gln Arg Cys Arg His Val Lys Arg 230 235 Ser Phe Ala Tyr Pro Ser Phe Leu Glu Glu Asp Ala Val Asp Gly Ala 245 250 Asp Thr Phe Asp Ser Ser Phe Phe Ser Lys Glu Glu Met Ser Ser Met 260 265 Pro Asp Asp Val Phe Glu Ser Pro Pro Leu Ser Ala Ser Tyr Phe Arg 280 Gly Val Pro His Ser Ala Ser Pro Val Ser Pro Asp Gly Val His Ile 295 300 Pro Leu Lys Glu Tyr Ser Gly Gly Arg Ala Leu Gly Pro Gly Thr Gln 315 310 Arg Gly Lys Arg Ile Ala Ser Lys Val Lys His Phe Ala Phe Asp Arg 330

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Ile 465		Arg	Thr		Gly 470	Cys	Cys	Val		Asn 475	Asp	Arg	Ser	Gly 4	Cys 80
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